CLAIMS

What is claimed is:

1.   A method for porting software developed using a single threaded modeling tool to a multiple threaded environment, the method comprising:

using the single threaded modeling tool to model the software; and

providing a porting layer, the porting layer performing as follows:

porting in variables into a multiple threaded operating environment by reference and not as variables so that each thread can access variables by reference.

2.   The method of claim 1 wherein the single threaded modeling tool produces variables as global variables and not using the global variables in operation of a plurality of threads in the multiple threaded operating environment.

3.   The method of claim 1 wherein the porting layer comprises a root process table having process description block entries, each process in the process description block entry having static variables.

4.   The method of claim 1 wherein a modeling language used in the software development is SDL and the single threaded software tool is Telelogic Tau C-micro with light integration.

5.   A wireless communication device comprising:

at least one system processor and at least one communication processor;

a communication module to facilitate communication between each system and communication processor;

a shared memory associated with the communication module;

each system processor and communication processor having an associated operating system, the operating system performing code generated from a software

model, the software model developed using a single threaded modeling tool, a porting layer ports code generated by the single threaded modeling tool to a multiple threaded environment, the porting layer porting in variables into the multiple threaded operating environment by reference and not as variables so that each thread can access variables by reference.

6.   The wireless communication device of claim 5 wherein the single threaded modeling tool produces variables as global variables and not using the global variables in operation of a plurality of threads in the multiple threaded operating environment.

7.   The wireless communication device of claim 5 wherein the porting layer comprises a root process table having process description block entries, each process in the process description block entry having static variables.

8.   The wireless communication device of claim 5 wherein a modeling language used in the software development is SDL and the single threaded software tool is Telelogic Tau C-micro with light integration.

9.   The wireless communication device of claim 5 wherein the wireless communication device is a wireless transmit/receive unit.